B13 cancel.

5. A vibration wave driving apparatus according to Claim 4, wherein the surface of said output shaft supporting the sliding bearing or the bearing surface of said sliding bearing is formed of resin.

6. Cancelled.

7. A vibration wave driving apparatus according to Claim 1, wherein at least one of the plurality of bearings provided in said case is a sliding bearing.

8. A vibration wave driving apparatus according to Claim 7, wherein the surface of said output shaft supported by the sliding bearing or the bearing surface of said sliding bearing is formed of resin.

9. (Twice Amended) A vibration wave driving apparatus according to Claim 1, wherein the through-hole of said rotary member has a bearing supported by said output shaft.

REMARKS

The claims now pending in the application are Claims 1 to 5 and 7 to 9, with Claim 1 being the only independent claim. Claim 6 has been canceled. Claims 1 and 9 have been amended herein.

In the Official Action dated April 26, 2002, Claim 1 was rejected under 35 U.S.C. 102(e), as anticipated by U.S. Patent No. 6,140,741 (Tamai), and Claims 1 to 9

were rejected under 35 U.S.C. 103(a), as unpatentable over the Tamai '741 patent in view of U.S. Patent No. 5,739,623 (Kanazawa). Reconsideration and withdrawal of the rejections respectfully are requested in view of the following remarks.

The rejections of the claims over the cited art respectfully are traversed. Nevertheless, without conceding the propriety of the rejections, Claim 6 has been cancelled, and Claims 1 and 9 have been amended to recite even more clearly various novel features of the present invention, with particular attention to the Examiner's comments. Support for the proposed amendments may be found in the original application. No new matter has been added.

Independent Claim 1 relates to a vibration wave driving apparatus, and recites, *inter alia,* the features of an output shaft extending through a through-hole of a vibration member and a rotary member, and rotatable with the rotary member, where *the output shaft supports the vibration member at a position within the through-hole of the vibration member (for relative rotation) and corresponding to a node of a vibration generated in the vibration member.* As disclosed in greater detail in the present application, and as will be readily understood by those skilled in the art, this structure of the present invention provides a significant improvement over structures of the prior art in that, by supporting the vibration member at a position within the through-hole and corresponding to a node of the vibration, the output shaft helps stabilize the vibration member and prevents the vibration member from shifting out of radial alignment within the actuator device, thereby significantly reducing friction/drag, wear, noise and/or vibration.

Applicant submits that the prior art fails to anticipate the present invention. Moreover, Applicant submits that there are differences between the subject matter sought

to be patented and the prior art, such that the subject matter taken as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made.

The Tamai '741 patent relates to a vibration type actuator and discloses an actuator including a vibration member, a movable member (rotor) 8, and an output shaft 2 extending through a through-hole of a shaft-shaped fastening member (hollow bolt) 1 of the vibration member and a through-hole of the moveable member 8, and rotatable by rotation of the movable member 8 (*See, e.g.*, Fig.1 and Claim 1 of the Tamai '741 patent). However, Applicant submits that the Tamai '741 patent fails to disclose or suggest at least the above-discussed features of the present invention. Rather, in the Tamai '741 patent, the vibration member is constructed of a disk-shaped support member 3 and a piezoelectric element 4 sandwiched between two metallic members 5 and 6 and fastened together by fastening member 1, where the vibration member is supported by the support member 3 (*See* Fig. 1 and the corresponding text at column 2, lines 10 to 18). Figs. 4 and 6 illustrate additional embodiments having a similar construction. As clearly illustrated in each of these embodiments, the Tamai '741 patent teaches that the diameter of the hollow portion of fastening member 1 (and thus the vibration member) is substantially larger than that of the output shaft 2. Nowhere does the Tamai '741 patent disclose or suggest that the output shaft 2 is arranged to support the vibration member at a position within the through-hole of the vibration member and corresponding to a node of a vibration generated in the vibration member, as disclosed and claimed in the present application.

The Kanazawa '623 patent relates to a vibration wave driven motor, and was cited by the Examiner as teaching the use of a sliding bearing. However, Applicant submits that the Kanazawa '623 patent fails to disclose or suggest at least the above-

discussed features of the present invention, and fails to remedy the deficiencies of the Tamai '741 patent set forth above. Specifically, the Kanazawa '623 patent fails to disclose or suggest at least the feature of a rotatable output shaft. Rather, in the Kanazawa '623 patent the output shaft is fixed. The Kanazawa '623 patent fails to disclose or suggest the feature of a rotatable output shaft that supports a vibration member at a position within the through-hole of the vibration member and corresponding to a node of a vibration generated in the vibration member, as disclosed and claimed in the present application, and therefore is not believed to add anything to the Tamai '741 patent that would make obvious the claimed invention.

For the above reasons, Applicant submits that independent Claim 1 is allowable over the cited art.

Claims 2 to 5 and 7 to 9 depend from Claim 1, and are believed to be allowable for the same reasons. Moreover, each of these dependent claims recites additional features in combination with the features of independent Claim 1, and is believed to be allowable in its own right. Individual consideration of the dependent claims respectfully is requested.

Applicant requests that the present Amendment be entered under 37 CFR § 1.116. Applicant submits that the present amendments merely are minor or formal in nature, and reduce the number of issues for consideration. Applicant believes the present Amendment was necessitated by the outstanding Official Action, and submits that the present amendments were not previously made because Applicant believes the prior claims are allowable.

Applicant believes that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action, and submits that the application is in allowable form. Favorable consideration of the claims and passage to issue of the present application at the Examiner's earliest convenience earnestly are solicited.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

Attorney for Applicant

Registration No. 32,078

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200
CPW\gmc

DC_MAIN 103802v1